

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of forming a coating film

which comprises, sequentially, process steps of applying an electrodeposition coating [1] to an article to be coated, a drying process step, and process steps of applying an electrodeposition coating [2] thereon, followed by a baking process step,

wherein said process steps of applying the electrodeposition coating [1] comprise (i) a step of immersing the article to be coated in the electrodeposition coating and (ii) a step of applying a voltage between the article to be coated and the anode,

said process steps of applying the electrodeposition coating [2] thereon comprise (i) a step of immersing the article to be coated in the electrodeposition coating, (ii) a step of applying a voltage higher than the voltage applied in step [1](ii) between the article to be coated and the anode,

said electrodeposition coating [1] containing a sulfonium group-containing resin, ~~and~~
giving a film thickness to a face B of the article to be coated of not more than one tenth of the film thickness of a face A of the article when used in the electrodeposition coating of a coating with a resin solid matter ~~solidmatter~~ of 20% by weight by a four sheet box method at 100 V and 40 C° for 120 seconds following a rise time of 5 seconds to provide the face A with a 20 to 30 µm film thickness, and

said electrodeposition coating [2] having a time point at which the electric resistance value per unit volume of a deposited coat increases in the process of electrodeposition under a constant current condition.

2. (currently amended): The method of forming a coating film according to Claim 1, wherein the sulfonium group-containing resin in the electrodeposition coating [1] is a resin (A) having at least one functional group selected from the group consisting of propargyl, carboxyl, epoxy, blocked isocyanate ~~isocyanate~~ and hydroxyl groups and/or an unsaturated double bond.

3. (currently amended): The method of forming a coating film according to Claim 2, wherein the resin (A) is a resin (A1) having a sulfonium group, an aliphatic hydrocarbon group of 8 to 24 carbon atoms, which optionally contains ~~contain~~ an unsaturated double bond within the chain thereof, and a propargyl group.

4. (original): The method of forming a coating film according to Claim 3, wherein the resin (A1) has an epoxy resin skeleton.

5. (currently amended):): The method of forming a coating film according to Claim 1, wherein the resin (A) is at least one resin (A2) selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, and acrylic resins ~~and modifications of these~~.

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6. (original): The method of forming a coating film according to Claim 5,
wherein the resin (A2) does not have a propargyl group but the electrodeposition coating [1]
contains a curing agent (B) composed of a melamine or a blocked isocyanate.

7. (currently amended): The method of forming a coating film according to Claim 2,
wherein the electrodeposition coating [1] contains a resin (C1) having a number average
molecular weight of 1,000 to 30,000, and

said resin (C1) is at least one member selected from the group consisting of polyester
resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, and acrylic
resins, ~~and modifications of these.~~

8. (currently amended): The method of forming a coating film according to Claim 1,
wherein the electrodeposition coating [2] contains a resin (A3) having a sulfonium group,
an aliphatic hydrocarbon group of 8 to 24 carbon atoms, which optionally contains ~~contain~~ an
unsaturated double bond within the chain thereof, and a propargyl group.

9. (original): The method of forming a coating film according to Claim 8,
wherein the resin (A3) has an epoxy resin skeleton.

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10. (currently amended): The method of forming a coating film according to Claim 8,
wherein the electrodeposition coating [2] contains a resin (C2) having a number average
molecular weight of 1,000 to 30,000, and

said resin (C2) is at least one member selected from the group consisting of polyester
resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, and acrylic
resins, ~~and modifications of these.~~

11. (previously presented): The method of forming a coating film according to Claim 1,
wherein the electrodeposition coating [1] and the electrodeposition coating [2] each contains a
metal acetate and/or an acetylacetonate complex as a catalyst, and

said metal is at least one member selected from the group consisting of copper, cerium,
aluminum, tin, manganese, zinc, cobalt and nickel.

12. (canceled).

13. (currently amended): The method of forming a coating film to Claim 2,
wherein the resin (A) is at least one resin (A2) selected from the group consisting of
polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins,
and acrylic resins ~~and modifications of these.~~

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14. (currently amended): The method of forming a coating film according to Claim 3, wherein the electrodeposition coating [1] contains a resin (C1) having a number average molecular weight of 1,000 to 30,000, and

said resin (C1) is at least one member selected from the group consisting of polyester resin, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, and acrylic resins, ~~and modification of these.~~

15. (currently amended): The method of forming a coating film according to Claim 4, wherein the electrodeposition coating [1] contains a resin (C1) having a number average molecular weight of 1,000 to 30,200, and

said resin (C1) is at least one member selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, and acrylic resins, ~~and modifications of these.~~

16. (currently amended): The method of forming a coating film according to Claim 9, wherein the electrodeposition coating [2] contains a resin (C2) having a number average molecular weight of 1,000 to 30,000 and

said resin (C2) is at least one member selected from the group consisting of polyester resins, polyether resins, polycarbonate resins, polyurethane resins, polyolefin resins, and acrylic resins, ~~and modifications of theses.~~

17. (previously presented): The method of forming a coating film according to Claim 2,

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wherein the electrodeposition coating [1] and the electrodeposition coating [2] each contains a metal acetate and/or an acetylacetonate complex as a catalyst, and

said metal is at least one member selected from the group consisting of copper, cerium, aluminum, tin, manganese, zinc, cobalt and nickel.

18. (previously presented): The method of forming a coating film according to Claim 5, wherein the electrodeposition coating [1] and the electrodeposition coating [2] each contains a metal acetate and/or an acetylacetonate complex as a catalyst, and said metal is a least one member selected from the group consisting of copper, cerium, aluminum, tin, manganese, zinc, cobalt and nickel.

19. (canceled).

20. (canceled).

21. (new): The method of forming a coating film according to claim 1, wherein the step (i) of the process of electrodeposition coating [1] is carried out by applying a voltage of 50 to 200 V and for the time to apply of 10 seconds to 3 minutes.

22. (new): The method of forming a coating film according to claim 1, wherein the step (i) of the process of electrodeposition coating [2] is carried out by applying a voltage of 150 to 400 V and for the time to apply of 2 minutes to 3 minutes.